REMARKS

The Office Action dated December 8, 2008, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

Status of the Claims

Claims 1-5, 7, 15-17, 19-22, 37-41, 43, 47, 48, 50, 52-58, 60, 64, 65, 67-75, 77, 78, 81 and 82 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claims 23-36 have been cancelled without prejudice or disclaimer. New claims 85-87 have been added. No new matter has been added. Thus, claims 1-22 and 37-87 are currently pending in the application and are respectfully submitted for consideration.

Incomplete Office Action

While the Office Action Summary states that claim 48 was rejected, no rejection of this claim was presented anywhere in the Office Action. MPEP 707.07(d) states that "[w]here a claim is refused for any reason relating to the merits thereof it should be 'rejected' and the ground of rejection **fully and clearly stated**, and the word 'reject' **must** be used. The examiner should designate the *statutory basis* for any ground of rejection by express reference to a section of 35 U.S.C. in the opening sentence of each ground of rejection" (emphasis added). As such, the Office Action is not complete as to all matters as required by 37 C.F.R. § 1.104(b) because the actual disposition of claim 48 is unclear.

Accordingly, Applicants submit that the finality of the outstanding Office Action must be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 1-16, 19-32, 34, 37-47, 49 and 52-84 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shaheen et al. (U.S. Publication No. 2003/0035401) in view of Rezaiifar et al. (U.S. Patent No. 6,850,983). While only claim 1 was listed in the heading of the rejection, the remaining claims were addressed in the body thereof. Also, the second mention of claim 68 on page 9 appears to correspond with the features of claim 69. If this is not what was intended, Applicants respectfully request that the Examiner provide an appropriate indication in the next Action. The Office Action took the position on pages 3-13 that the combination of Shaheen et al. and Rezaiifar et al. teaches all of the features of the rejected claims. Applicants respectfully traverse the rejection. Reconsideration of the claims is respectfully requested.

Independent claim 1, from which claims 2-18 and 84 depend, recites a method including receiving, by a fourth network element, a request by a third network element for an authorization for connection parameters. At least one service data flow is used in a communication connection from a first communication entity to the third network element and the communication connection aggregates multiple service flows. The method also includes deciding, in the fourth network element, on the connection parameters to be authorized for the communication connection and on service data flows that can be provided for the communication connection and sending a decision message from the fourth network element to the third network element. The decision message includes an information portion from which, for each service data flow, it is derivable that for at least one of service data flows the fourth network element is to be consulted for a further authorization to admit the service flow.

Independent claim 19, from which claims 20-22 depend, recites a system including a third network element via which a communication connection is initialized, and that is configured to send a connection parameter request signaling for at least one service data flow to be used in the communication connection from a first communication entity. The system also includes a fourth network element to which the third network element requests an authorization for connection parameters. The fourth network element is configured to decide on the connection parameters to be authorized for the communication connection and on service data flows that can be provided for the communication connection. At least one service data flow is used in the communication connection and the communication connection aggregates multiple service flows. The fourth network element is further configured to generate and send a decision message to the third network element. The decision message includes an information portion from which, for each service data flow, it is derivable that for at least one of the service data flows the fourth network element is to be consulted for a further authorization to admit the service flow.

Independent claim 37, from which claims 38-51 and 85 depend, recites an apparatus including a processor configured to receive from a third network element, via which a communication connection is initialized by a connection parameter request signaling for at least one service data flow to be used in the communication connection from a first communication entity, a request for an authorization for the connection parameters. At least one service data flow is used in the communication connection and the communication connection aggregates multiple service flows. The processor is also configured to decide on connection parameters to be authorized for the communication connection and on service data flows that can be provided for the communication connection and to generate and initiate sending of a decision message to the third network element. The decision message includes an information portion from which, for each service data flow, it is derivable that for at least one of service data flows the apparatus is to be consulted for a further authorization to admit the service flow.

Independent claim 52, from which claims 53-66 depend, recites an apparatus including a processor configured to receive, when a communication connection is initialized by a first communication entity, a connection parameter request signaling for at least one service data flow to be used in the communication connection. At least one service data flow is used in the communication connection and the communication connection aggregates multiple service flows. The processor is also configured to request, from a fourth network element, an authorization for the connection parameters. The fourth network element is configured to decide on connection parameters to be authorized for the communication connection and on service data flows that can be provided for the communication connection. The processor is further configured to receive from the fourth network element a decision message. The decision message includes an information portion from which, for each service data flow, it is derivable that for at least one of service data flows the fourth network element is to be consulted for a further authorization to admit the service flow.

Independent claim 67 recites a computer program embodied on a computer-readable storage medium configured to control a processor to perform a process, including receiving, by a fourth network element, a request by a third network element for an authorization for connection parameters. At least one service type is used in a communication connection from a first communication entity to the third network element and the communication connection aggregates multiple service flows. The process also includes deciding, in the fourth network element, on the connection parameters to be authorized for the communication connection and on service types that can be provided for the communication connection and sending a decision message from the fourth network element to the third network element. The decision message includes an information portion from which, for each service, it is derivable that for a first type of service flows the fourth network element is to be consulted for a further authorization to admit the service flow, and that for a second type of service flows the fourth network element is not to be consulted for a further authorization to admit the service flow.

Independent claim 68 recites a computer program embodied on a computer-readable storage medium configured to control a processor to perform a process, including receiving, by a third network element, when a communication connection is initialized by a first communication entity, a connection parameter request signaling for at least one service data flow to be used in the communication connection. At least one service data flow is used in the communication connection and the communication connection aggregates multiple service flows. The process also includes requesting, by the third network element from a fourth network element, an authorization for the connection parameters. The fourth network element is configured to decide on connection parameters to be authorized for the communication connection and on service data flows that can be provided for the communication connection. The process further includes receiving, by the third network element, a decision message from the fourth network element. The decision message comprises an information portion from which, for each service data flow, it is derivable that for at least one of service data flows the fourth network element is to be consulted for a further authorization to admit the service flow.

Independent claim 69, from which claims 70-83 depend, recites a method including receiving, by a third network element, when a communication connection is initialized by a first communication entity, a connection parameter request signaling for at least one service data flow to be used in the communication connection. At least one service data flow is used in the communication connection and the communication connection aggregates multiple service flows. The method also includes requesting, by the third network element from a fourth network element, an authorization for the connection parameters. The fourth network element is configured to decide on connection parameters to be authorized for the communication connection and on service data flows that can be provided for the communication connection. The method further includes receiving, by the third network element, a decision message from the fourth network element. The decision message includes an information portion from which, for each service data flow, it is derivable that for at least one of service data flows the fourth network element is to be consulted for a further authorization to admit the service flow.

As will be discussed below, Shaheen et al. and Rezaiifar et al., both individually and in combination, fail to teach or suggest all of the features of the presently pending claims.

Shaheen et al. generally discusses "the employment of session initiation protocol (SIP) for establishing the proper resource reservation protocol RSVP capabilities and requirements as a prerequisite to establishing a communication using RSVP and further establishing quality of service (QoS) capabilities of the UE and GGSN to insure the desired quality of service (QoS)" (paragraph [0002]).

> In accordance with the present [alleged] invention, the originating UE, during session setup, sends an SIP message to a proxy-call state control function (P-CSCF) of a home network providing a list of all media types, capabilities and preferred mode of operation. The P-CSCF, which contains the policy control function (PCF) is ultimately responsible for allocation of resources necessary to carry out the desired session. The SIP information is utilized to make a final decision regarding the RSVP operation. The P-CSCF (PCF) may request the RSVP capabilities of the GGSN, which capabilities may be stored within a suitable locale, and based on capability information of the UE and GGSN, a final setup decision is made. If both the UE and GGSN are RSVP capable, the P-CSCF (PCF) can decide the entity which will provide RSVP signaling. On the other hand, if the GGSN is not RSVP-capable or does not wish to support an RSVP proxy operation,

> the decision to initiate RSVP signaling may be passed to the UE. If the P-CSCF determines that GGSN shall provide the RSVP proxy, the P-CSCF advises the originating UE using SIP to stop RSVP signaling. A decision is then passed to the GGSN using common open policy server (COPS) protocol to start RSVP operation.

(Paragraph [0006] of Shaheen et al.).

Rezaiifar et al. generally discusses "a method and apparatus for service authorization in a communication system" (column 1, lines 9 and 10). The method includes "receiving at a controller a service query addressed to a service selector; providing from the controller a set of parameters to the service selector in accordance with said service query; and authorizing at the service selector said service in accordance with said set of parameters" (column 2, line 67, through column 3, line 4, of Rezaiifar et al.).

Independent claim 1 recites, in part, that "at least one service data flow is used in a communication connection", "and the communication connection aggregates multiple service flows". Independent claims 19, 37, 52 and 67-69, which each have their own scope, recite similar features. The Office Action took the position that paragraphs [0076] and [0077] of Shaheen et al. teach these features (see page 3 of the Office Action, alleging that "P-CSCF receives listings from UE the PCSCF authorizes the resources for the flows"). Applicants respectfully disagree.

Paragraphs [0075]-[0077] of Shaheen et al. appear to discuss communications between UE #2 and a P-CSCF in the context of determining codecs and supporting QoS protocols, such as RSVP (see paragraph [0075]). These operations appear to be conducted responsive to a session invitation message (namely, a SIP INVITE message). For instance, paragraph [0075] of Shaheen et al. discusses that "FIG. 13 shows a modified SIP 183 message format from UE #2 to P-CSCF #2 **in response to the INVITE from UE #1**" (emphasis added). Shaheen et al. discusses that RSVP capabilities may be shared via the SIP protocol. However, as noted in paragraph [0059] of the present specification, a service may have multiple service flows to be controlled, and Applicants do not find the concept of flow control, as claimed, anywhere in Shaheen et al. Rather, Shaheen et al. merely mentions media flows and session flows. Also, Applicants submit that in Shaheen et al., the P-CSCF receives a SIP invite message, which is actually a session invitation message, rather than an authorization request, as claimed. Further, Applicants submit that in Shaheen et al., the invite message is sent to remote peer user equipment, rather than to an access control entity, as is performed in some embodiments of the present invention. Additionally, nothing is cited or found in Rezaiifar et al. that overcomes these deficiencies of Shaheen et al.

Independent claim 1 also recites that "the decision message comprises an information portion from which, for each service data flow, it is derivable that for at least one of service data flows the fourth network element is to be consulted for a further authorization to admit the service flow." Independent claims 19, 37, 52 and 67-69, which each have their own scope, recite similar features. The Office Action conceded on page 3 that Shaheen et al. fails to teach these features. Rather, the Office Action relied on column 6, line 39, through column 7, line 6, of Rezaiifar et al. to allegedly cure these deficiencies of Shaheen et al. Applicants respectfully submit that Rezaiifar et al. also fails to teach or suggest these features.

The cited section of Rezaiifar et al. discusses that "the AAA 116(2) must authorize the AT 112(2) for the communication session 202" and "the BSC/PCF 108(3) sends an authentication request 204 to the AAA server 116(2)" (see column 6, lines 39-43). "If the number received from the AT 112(2) matches the number calculated at the AAA 116(2), the AAA 116(2) authorizes communication session 202, otherwise the connection should be terminated" (column 6, lines 58-61, of Rezaiifar et al.). "The AAA 116(2) returns authorization 204 for the communication session 202 together with required RADIUS attributes of the AT 112(2). Such required attributes comprise attributes for authorization of additional services" (column 6, lines 63-66, of Rezaiifar et al.).

As such, Applicants submit that Rezaiifar et al. discusses that attributes for authorization of **additional services** may be included. On the other hand, claim 1 recites that it is derivable from the information portion that for at least one of service data flows, the fourth network element is to be consulted for a **further authorization** to admit the service flow. In other words, the information portion may indicate that additional authorization may be required, whereas in Rezaiifar et al., services are authorized and additional authorization is not disclosed. Thus, Rezaiifar et al. only performs a single authorization in the section cited by the Office Action and further, nowhere does Rezaiifar et al. indicate that further authorization may be required to admit a service flow, as claimed.

Claim 74 recites, in part, that "the communication control or gateway network element is configured to trigger a dynamic policy request." Claims 40, 57 and 74, which each have their own scope, recite similar features. The Office Action alleged that paragraphs [0076]-[0078] of Shaheen et al. disclose these features, without providing reasoning. While Applicants cannot be certain in the absence of any reasoning on the record, Applicants posit that perhaps the Examiner equated the claimed dynamic policy request to the SIP negotiation discussed in Shaheen et al. However, the SIP negotiation discussed in Shaheen et al. is from one user terminal to another and across network SIP proxies. On the other hand, claim 6 recites that it is the **communication control or gateway network element** that triggers a dynamic policy request based on the indication in the decision message. Further, nothing is cited or found in Rezaiifar et al. that overcomes these deficiencies of Shaheen et al.

Claims 23-32 and 34 have been cancelled without prejudice or disclaimer. Claims 2-16, 20-22, 38-47, 49, 53-66 and 70-84 depend from independent claims 1, 19, 37, 52 or 69 and add further features thereto. Thus, the arguments above with respect to the independent claims also apply to the dependent claims.

Per the above, Shaheen et al. and Rezaiifar et al., both individually and in combination, fail to teach or suggest all of the features of the above-rejected claims under 35 U.S.C. § 103(a). Accordingly, it is respectfully submitted that the rejection is overcome and respectfully requested that the rejection be withdrawn.

Claims 17, 18, 35, 36, 50 and 51 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Shaheen et al. in view of Rezaiifar et al. and further in view of Mochizuki et al. (U.S. Patent No. 7,024,487). Claims 35 and 36 have been cancelled without prejudice or disclaimer. Claims 17, 18, 50 and 51 depend from independent claims 1 or 37 and add further features thereto. Nothing is cited or found in Mochizuki et al., which generally discusses "an assistant server and a path connection control method for receiving a communication service request from a user terminal and connecting the user terminal to a communication path which matches the request in a communication network constructed by a plurality of communication service networks" (column 1, lines 11-16), that overcomes the deficiencies of Shaheen et al. and Rezaiifar et al. discussed above with respect to the independent claims. Thus, the arguments above with respect to the independent claims also apply to dependent claims 17, 18, 50 and 51.

Accordingly, it is respectfully submitted that the rejection is overcome and respectfully requested that the rejection be withdrawn.

New Claims

New claims 85-87 have been added. Claim 85, which has its own scope, depends from independent claim 37 and recites similar features to dependent method claim 84. Means-plus-function claims 86 and 87, which each have their own scope, recite similar features to apparatus claims 37 and 52, respectively. Thus, it is respectfully submitted that the new claims patentable distinguish over the cited art for at least the reasons discussed above with respect to the independent claims.

Conclusion

For at least the reasons presented above, it is respectfully submitted that claims 1-22 and 37-87, comprising all of the currently pending claims, patentably distinguish over the cited art. Accordingly, it is respectfully requested that the claims be allowed and the application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

Michael A. Leonard II
Attorney for Applicants
Registration No. 60,180

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14^{TH} Floor
8000 Towers Crescent Drive
Vienna, Virginia 22182-6212
Telephone: 703-720-7800
Fax: 703-720-7802

MAL:jf

Enclosures: Additional Claim Fee Transmittal
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